

$$V(\text{Ca}) = 0,1 \text{ моль}$$

$$V(\text{Ca}(\text{OH})_2) = 0,1 \text{ моль}$$

$$V(\text{H}_2) = 0,1 \text{ моль}$$

$$V(\text{H}_2\text{O}) = 0,2 \text{ моль}$$

$$m_{\text{p-uy}} = 4 + 1000 - 0,2 = 1003,8 \text{ г}$$

$$m_{\text{p-uy}} = m(\text{Ca}) + m(\text{H}_2\text{O}) - m(\text{H}_2)$$

$$V_{\text{p-uy}} = 1,0038 \text{ л}$$

$$m(\text{H}_2\text{O})_{\text{ост}} = 1000 - 3,6 = 996,4 \text{ г}$$

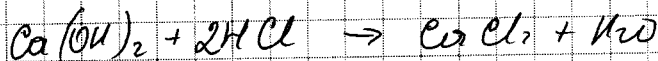
$$V(\text{H}_2\text{O}) = m/M = 996,4/18 = 55,356 \text{ моль}$$

$$c_M = \frac{V}{V} \quad c_M(\text{Ca}(\text{OH})_2) = \frac{0,1}{1,0038} = 0,0996 \text{ моль/л}$$

$$c_M(\text{H}_2\text{O}) = \frac{55,356}{1,0038} = 55,146 \text{ моль/л}$$

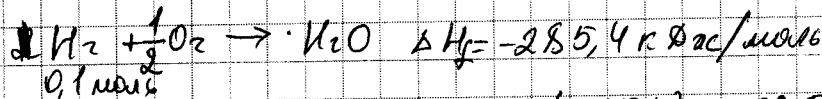
$$\omega(\text{Ca}(\text{OH})_2) = \frac{m_{\text{p-uy}}}{m_{\text{p-uy}}} \cdot 100\% = \frac{4,4}{1003,8} \cdot 100 = 0,437\%$$

$$\omega(\text{H}_2\text{O}) = \frac{996,4}{1003,8} \cdot 100\% = 99,3\%$$



$$V(\text{HCl}) = 0,2 \text{ моль}$$

$$V(\text{HCl}) = V/c_M = 0,2/0,05 = 4 \text{ л}$$



$$0,1 \text{ моль}$$

$$\Delta H = 0,1 \cdot (-285,4) = -28,54 \text{ Дж}$$